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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/187,370	11/06/1998	DONALD C. WILCOXSON	22-0009	2971

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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 01/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/187,370

Applicant(s)

WILCOXSON ET AL.

Examiner

Ronald Abelson

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-10,17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-10,17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Response to Amendment

1. The indicated allowability of claims 1, 6-10, 17, 19 and 20 is withdrawn in view of the newly discovered reference(s) to Olds and Watanabe. Rejections based on the newly cited reference(s) follow.

Drawings

2. Figures 1-3 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Olds (US 5,574,969).

Regarding claim 1, Olds teaches a method and apparatus for interference management of a communications satellite serving multiple user terminals in a satellite based cellular communications system (fig. 1). The system comprises receiving a request for service from a user terminal (col. 9 lines 23 - 26), accessing at least one communications parameter selected from a group of communications system parameters consisting of antenna pattern parameters, spacecraft/antenna point error parameters, link condition parameters (antenna pattern, col. 10 lines 1-4), determining a connection parameter to minimize intra-system interference based upon the selected communications system parameter (channel, col. 10 lines 1-4), allocating the connection and making the connection (fig. 6 box 100, col. 10 lines 1-4).

Regarding claim 6, monitoring if the communications connection is still active (fig. 6 box 94, col. 9 lines 23 - 26).

Regarding claim 7, redetermining the connection parameter based upon an updated communications system parameter (col. 10 lines 1-4).

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Regarding claim 8, the connection parameter is a frequency channel (channel, col. 10 lines 1-4).

Regarding claim 9, time slot assignment (col. 3 lines 43-44).

Regarding claim 10, updating the group of communications systems parameters after the communications connection ends (fig. 6 box 96, 92).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olds in view of Watanabe (US 4,052,670).

Regarding claim 19, Olds teaches a method and apparatus for interference management of a communications satellite serving multiple user terminals in a satellite based cellular communications system (fig. 1). The system comprises receiving a

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request for service from a user terminal (col. 9 lines 23 - 26), accessing one communications parameter selected from a group of communications system parameters consisting of antenna pattern parameters, spacecraft/antenna point error parameters, link condition parameters (antenna pattern, col. 10 lines 1-4), determining a connection parameter to minimize intra-system interference based upon the selected communications system parameter (channel, col. 10 lines 1-4), allocating the frequency channel and timeslot parameter in addition to making the connection (fig. 6 box 100, col. 10 lines 1-4), periodically determining the frequency channel and time slot to minimize intra-system interference (dynamically assigned in real-time, col. 2 lines 21-24), and updating databases (fig. 3 box 42, lines 44-47).

Olds is silent on accessing a second communications parameter selected from a group of communications system parameters consisting of antenna pattern parameters, spacecraft/antenna point error parameters, link condition parameters.

Watanabe teaches accessing a second communications parameter/link condition affects the timeslot/frequency channel assignment (col. 1 lines 15-24).

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Therefore it would have been obvious to one of ordinary skill in the art, having both Olds and Watanabe before him/her and with the teachings [a] as shown by Olds, a system comprising receiving a request for service from a user terminal, accessing at least one communications parameter selected from a group of communications system parameters consisting of antenna pattern parameters, spacecraft/antenna point error parameters, link condition parameters, determining a connection parameter to minimize intra-system interference based upon the selected communications system parameter, allocating the connection and making the connection periodically determining the frequency channel and time slot to minimize intra-system interference, and updating databases, and [b] as shown by Watanabe, the link condition affects the timeslot/frequency channel assignment, to be motivated to modify the system of Olds by not transmitting over 10 GHz during in areas where it is raining. This would improve the system since the signal is attenuated by rain.

Regarding claim 17, redetermining the frequency channel and timeslot after a determination is made that the communications connection is still active (Olds: fig. 6 box 10).

Regarding claim 20, the plurality of communications system parameters comprises location of active user terminals and frequency channel and time slots allocated to the active users

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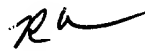
(Olds: fig. 4 see connections from satellites 52, 62, and 72 to users 56, 66, 76, fig. 6 box 100).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Ronald Abelson
Examiner
Art Unit 2666



January 22, 2003


SEEMA S. RAO 1/22/03
SUPERVISORY PATENT EXAMINER
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